

Before the Federal Communications Commission

Washington D.C. 20554

In the matter of)	
)	
Amendment of Parts 13 and 80 of the)	WT Docket Nos. 00-48 and 02-102
)	
Commission's Rules Concerning)	
)	
Maritime Communications)	

Comments of

Owen Anderson

GMDSS Instructor and Consultant

Submitted 15 August 2002

Most of my professional career has been in Maritime Communications and Technology. I have held a FCC First Class Radio Telegraph License continuously for over 54 years. I also hold a 9th issue U.S.C.G. License and a FCC GMDSS Radio Operators License. I have been active as a GMDSS Instructor and Consultant for the last 4 years.

I am in general agreement with most of the comments that will be submitted by the GMDSS Task Force.

As a GMDSS instructor who has interacted with a very large number of Deck Officers during GMDSS training my main concern is that the task of operating the new GMDSS equipment in most cases is the responsibility of the bridge watch officer who already has extensive duties to perform.

Consolidation of rules applicable to the GMDSS shipboard radio operator:

After 2 years in progress on this document some substantial changes have been made but additional changes are needed. Subpart-Q has now been essentially eliminated with several paragraphs being shifted elsewhere. However we still have rules that are scattered all over Part-80.

In my comments filed on the original NPRM in July 2000 I addressed the need to consolidate the rules applicable to shipboard GMDSS radio operators. That need has not been addressed. The problem starts with 80.1065 which states: **"The rules in this subpart are to be read in conjunction with the applicable requirements contained elsewhere in this part; however, in case of conflict, the provisions of this subpart shall govern with respect to the GMDSS"**.

This section goes on to say: **"Note: No provision of this subpart is intended to eliminate, or in anyway modify, other requirements contained in this part with respect to part II of title III of the Communications Act."** This is one of those Catch-22 clauses. I have never seen a copy of the **"Communications Act"** on board any ship nor is it a requirement. If there is something in this act that applies to the GMDSS radio operator then it should be clearly stated in the actual Part-80 rules.

Subpart-G: Safety Watch Requirements and Procedures. Extensive changes have been made to this section which appears to cover all equipment. This requires stations under Subparts R, S, T and W to refer to this section. This section now includes extensive rules on the use of DSC which apply only to DSC equipped vessels under Subpart-W. All Safety Watch Requirements and Procedures relating to GMDSS vessels should be in Subpart-W and all references to DSC should be removed from Subpart-G which should pertain to radiotelephone stations other than GMDSS.

80.1065: There do not appear to be any changes proposed to this section. Possibly they have already been changed previously but there are numerous references to dates that are no longer relevant. There are also references to Subparts Q, R, S and T as well as part III of title III of the Communications Act. If it applies to GMDSS it should be listed in Subpart-W and not scattered elsewhere.

Aside from Great Lakes and Bridge-to-Bridge requirements we now have 3 major categories of compulsory equipped vessels covered in Subparts-R, S and W. Each of these 3 categories has major differences in their requirements. The logical approach would be to have each of these 3 categories completely self-contained so that the operators on these vessels could go to 1 specific section to find out the requirements for their specific vessel category. This will result in some duplication but we already have plenty of overlapping duplication and this change should result in less confusion.

There are also a number of items concerning ship operators that are located in Part-13 and elsewhere. There is no requirement to keep a copy of these rules on board the vessel. Important sections of such rules outside of Part 80 should be included or at least clearly referenced.

Logkeeping - A major issue:

Page-22, Paras-48-49 and page-36, Para-93: Station Logs. It is stated that it is not believed "that the proposed amendment will impose a burden on the Bridge Officer that is unreasonable in light of the benefits to be derived from the log keeping requirement."

It was stated: **Furthermore, the Radio Regulations and Chapter V of SOLAS require this type of record keeping.**

I refer to the ITU Manual; part B, Section II, Extracts from the Appendices to the Radio Regulations, Appendix 11, Section III.

3. A log in which the following are recorded as they occur, together with the time of the occurrence, **unless administrations have adopted other arrangements for recording all information which the log should contain:**

- a) a summary of all communications relating to distress, urgency and safety traffic;

Comment: The ITU regulations are the basic starting point for radio regulations but they allow for a great deal of modification and variation by each national administration. In the current proposed changes the above clause has already been modified regarding urgent and safety traffic. There is no valid reason why it cannot also be modified for distress communications.

Regarding SOLAS Chapter V. The only sections that appear relevant to communications are Regulations 31, 32 concerning Danger messages and **Regulation 33 Distress messages: Obligations and procedures.** I do not see any specific reference to radio logkeeping requirements.

However, I do note the following: **Regulation 15 Principles relating to bridge design, design and arrangement of navigational systems and equipment and bridge procedures.**

Item 2: Promoting effective and safe bridge resource management.

Item 6: Preventing or minimizing excessive or unnecessary work and any conditions or distractions on the bridge which may cause fatigue or interfere with the vigilance of the bridge team and the pilot.

In summary, the ITU regulations clearly allow for modification by national administrations and the current proposals in fact do so in regard to urgent and safety communications. Not only does SOLAS Chapter V, Regulation 33, NOT contain any specific requirement for such logkeeping it seems that Regulation 15 clearly supports my position that the rules need to be simplified.

The statement that the current rules will not impose an undue burden is not justified based on reports we receive from our GMDSS students who are still being swamped with numerous DSC calls on each watch. Most of these are false alerts. The ship station should not be required to collect and archive data of no relevance to its own station. That should be the responsibility of the appropriate coast stations and FCC monitoring facilities.

My main objection to the current wording is that it requires all distress communications to be logged. This requirement is burdensome enough now when there may be upwards of 6 or more DSC calls per bridge watch. Just imagine what it will be like when Sea Area A-1 is fully declared and when all the recreational boaters are fitted with DSC units.

These rules were written in the days of telegraph operations when there was a dedicated radio officer on board to fulfill these requirements. The number of distress alerts in those days was a small fraction of the number being received under GMDSS. There was also a requirement to make a copy of any such log entries for forwarding to the FCC for analysis. This requirement does not exist today and the radio logs are simply sent ashore for a 3 year archiving period and in most cases never seen again.

Most GMDSS equipment maintains an electronic log of 40 to 50 received (and in some cases transmitted) distress messages. If the rules were relaxed to limit the official log to communications only involving your own vessel it would be easy to check the accuracy of the log either during the annual inspection or during random checks by Port State Control personnel.

Proposed revision to 80.409 (e) on Log Keeping Requirements.

80.409 (e) Ship radiotelephone logs. Logs of ship stations which are compulsorily equipped for radiotelephony must contain the following applicable log entries and the time of their occurrence:

(1) A summary of all distress and urgency communications that directly involves your own vessel:

I feel the above covers it adequately. If more detail is desired it could specify that this requirement should include all transmissions of any kind including the acknowledgement of a distress or urgent transmission by another vessel and any subsequent traffic.

Making the above proposed changes will result in a reasonable rule that will provide a much higher level of compliance. I doubt that much over 5% of U. S. flag vessels are currently in full compliance with this provision of the rules.

Equipment Testing Procedures and Schedule - A major issue:

Equipment testing requirements are fragmented into various sections and are not clearly defined. Testing requirements are listed under 80.101, 80.409 (e), and 80.1099 (f)(2).

Page 22, Para-48. "The Commission also proposed to amend Section 80.409(e)(5) to require a weekly entry in radiotelephone logs that (1) the proper functioning of DSC equipment has been verified by actual communications or a test call, (2) the batteries or other reserve power sources are functioning properly, (3) the portable survival craft radio gear and radar transponders have been tested, and (4) the EPIRB's have been inspected.

Comments;

(1). This should NOT be a weekly test but a pre-departure and daily test.

(2). This should also be a pre-departure and daily test as evidenced by satisfactory battery meter readings at the console. (There should be a monthly check of the battery system including specific gravity and individual cell voltage measurements where appropriate).

(3). A monthly test the same as the EPIRB should be specified. An annual test is not sufficient and we know from direct experience that a weekly test is excessive and will frequently deplete the batteries. The same applies to the SART. It should be a monthly test for all survival craft equipment. It should be noted that the provisions in 80.409 are in conflict with those in 80.1099(f)(2) which states that portable equipment with primary batteries such as EPIRBs and SARTs should be checked at the same intervals (monthly).

All required GMDSS should be tested during pre-departure tests and thence daily except for all survival craft equipment and direct battery inspection which should be done monthly. Pre-Departure and daily tests should consist of the following:

1- VHF-DSC: Any self-test functions, Reception, Transmission and DSC functions by initiating a routine DSC call between two VHF stations.

2- Inmarsat-C terminal: Initiating a loop test transmission.

3- MF-HF-DSC: Any self-test functions, Reception and Transmission functions. If possible, conduct brief two-way communications by DSC, SITOR or Voice.

4- Battery charging equipment operating normally as indicated by meter readings.

5- Inspection of all survival craft equipment to insure they are present, correctly stored and available for use.

Survival Craft Radio Gear, SARTs, EPIRB and detailed battery test should be monthly.

Use of MF-HF DSC frequencies for routine calling- A major issue:

Pages-36-37, Paras-94-95: 80.1077 and 80.359. Refusing to allow any MF-HF DSC frequencies for routine calling. It says MF-HF DSC frequencies. It should specify DSC Distress, Urgent and Safety frequencies as there are several MF-HF duplex DSC frequencies allocated for routine calling of Public Correspondence Coast Stations.

Before GMDSS we always had "routine calling" rights on the voice and telegraph Distress, Urgent, Safety and "Calling" frequencies. GMDSS was supposed to improve maritime communications and we are encouraged to use it for general communications purposes. However, the system has deprived us of a very basic communication function: Making a routine call to another vessel. The present rules appear to follow the ITU regulations. We should make every effort to have this rule changed at the international level as it is contrary to the stated objectives of the IMO.

As an interim measure, pending appeal on this to ITU/IMO suggest granting simplex calling privileges on at least one set of these duplex routine DSC frequencies. A precedent has already been established by allowing 2177.0 kHz to be used for simplex calling. Further these frequencies are probably virtually unused now that most of the HF Public Correspondence stations have terminated their services. Mobile Radio/WLO may be the only U.S. station using them.

2182 Watch and Radio Direction Finders:

Page-14-15, Paras-28-30. 2182 kHz watch requirements. 80.305 (a)(2), (B)(1). Amending 80.1123 (d) to provide for a mandatory watch on 2182 kHz without specifying a sunset date.

The 2182 watch has been discontinued on GMDSS vessels and on most vessels the 2182 watch/alarm receivers have been removed.

Page-29, Para-70: 80.304 (b). Retaining 2182 watch including silent period requirements.

Page-19, Para-42: RDF apparatus 80.818 through 80.823 (now to be deleted from Subsection-Q and renumbered as 80.288 through 80.293). These sections require equipment that has been removed from many vessels operating under GMDSS rules. Certainly the auxiliary receiving antenna with its associated switching system which was incorporated into the main radio console has been removed from most GMDSS vessels and probably the RDF as well. I believe the new SOLAS regulations effective in July delete the RDF requirement completely. If it is still required by the Communications Act then the act should be promptly changed. These sections should be completely deleted.

Operating Procedures:

Page-29-30, Para-72: 80.314-80.316. Distress signals, distress calls and distress messages and Page 45, Para-120: 80.320-80.329.

With regard to 314-316 there are 3 different sections labeled Distress Signals, Distress Calls and Distress Messages. These all cover a single function or process. The transmission of a Distress Alert Message. Suggest deleting all references to telegraph procedures and combine the 3 sections into one section 80.314 titled "Distress signals, calls and messages".

Page-45, Para-120: 80.320-80.329. Distress Call and Message Transmission Procedures. A request for further comment was made. **(Note: If this section does not apply to GMDSS vessels then we should not need any reference to DSC procedures.)**

Delete all reference to radiotelegraph operation including the frequencies of 500 kHz and 8364 kHz.

Questions of wording:

Page-8, Para-12. designates the GMDSS Radio Operator's License as (GROL). While the letters may match, "GROL" is not the official acronym for this license. The FCC website lists this license as a "DO". GROL has historically been used to indicate the "General Radiotelephone Operator's License" although the official designation for this license is "PG". The term "GROL" has been used as a title for study guides for the "PG" license. Page-9-10, Paras-14-15: Again the term "GROL" is used in reference to the GMDSS Radio Operator's License.

Subsequently on Page-9, still Para-12, there is a proposed introduction of a "Restricted GMDSS Radio Operator's License to be designated "RGROL". Again, this would create confusion with the "PG" license and also not follow the existing 2-letter designations.

It appears that according to 80.151 (b) the terms GOL and ROL will be used for General and Restricted GMDSS Radio Operator designations.

In Paras-12-13 There was also discussion about a restricted GMDSS certificate for operation of Sea Area A2 equipment. This raises the question about compatibility with existing IMO requirements which requires the GOC operator's certificate for Sea Area A-2.

Page-10, Para-16: The term "restricted operator's license" is used without any reference to GMDSS. There is a possibility here for confusion with the "Restricted Radiotelephone Operator's Permit" (RP).

Page-28, Para-68: 80.213. Specifies **9300-9500** MHz for Radar Transponders. [P-30, Para-75: 80.375. SART's in band **9200-9500** MHz in accordance with ITU-R recommendation M.628.1. On P-32, Para-79 states **9300-9500** MHz].

Page-30, Para-75: 80.375. Operation of SARTs in the band **9200-9500** MHz. Note that 80.213 and 80.605 specify **9300-9500** MHz.

Miscellaneous Items:

Page-34, Para-86: 80.1067. The GMDSS Radio Maintainer's License is the highest radiotelephone technical license being issued since it includes elements 1, 3 and 9.

Page-41, Paras-109-110: Regarding the establishment of a recreational vessel operator's license of some kind. Consider making it mandatory for all recreational boaters using DSC equipment to carry a certificate showing specific training in the use of DSC equipment. This certification could be given by any person or organization approved by the USCG and/or FCC using an approved course. This would eliminate the need for an actual operating license to be issued by the FCC. To allow the use of DSC equipment by operators of voluntary stations without some reasonable level of mandatory training will create a real monster.

Page-47, Para-126. 80.1073. The proposed change is not necessary.

Page-48, Para-127. 80.1083. 4. Passenger ships... If EPIRB is not remotely activated it will be ok to have an additional EPIRB installed in the wheelhouse near the conning position. Not much use in a steel wheelhouse and most EPIRBs are not equipped for remote activation.

Page-49, Para-130. Frequencies should be listed by Carrier Frequency for SSB Voice frequencies and by Assigned Frequency for SITOR frequencies. This is the way the frequency display works on most equipment and it is can be confusing to list both the Carrier and Assigned frequencies.

Page-49, Para-131. 13.203 (a)(5). Provide for a 100 question test for Element-7. We are doing this now under a waiver and the rule should be amended accordingly. Regarding Element-7R please be advised that the USCG has approved a Restricted GMDSS STCW Model Course which provides for a written exam of 50 questions drawn from a 300 question test pool. The bulk of these questions are drawn from the 600 question test pool that is now being used for both the USCG STCW and the FCC Element-7 100 question exam. A copy of this 300 question test pool for the ROC or FCC Element-7R should be on file with FCC. If not I will be glad to supply a copy.

Submitted by:

Owen Anderson

1526 N.E. Perkins Way

Shoreline, WA 98155-2342

Phone: 206-364-4776

Fax: 206-364-8128

e-mail: anderow@att.net